STM 4.14.05

10/672,062

## => d ibib abs hitstr 1-6

 $\mathcal{L}_1$  ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:310207 CAPLUS

DOCUMENT NUMBER:

140:322996

TITLE:

Hindered amine-bonded light-

resistant colorants and compositions

therewith

INVENTOR(S):

Jong, Yon-Kyon; Yu, Sun-Min

PATENT ASSIGNEE(S):

Samsung Electronics Co., Ltd., S. Korea

SOURCE:

Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATION NO.	DATE		
JP 2004115812	A2	20040415	JP 2003-338029	20030929		
US 2004129178	A1	20040708	US 2003-672062	20030929		
PRIORITY APPLN. INFO.:			KR 2002-59138 A	20020928		
OTHER SOURCE(S):	MARPAT	140:322996				
GI						

$$\begin{bmatrix} R^{5} & R^{6} \\ C & R^{6} \end{bmatrix}_{n}$$

$$\begin{bmatrix} R^{4} & C & R^{1} - X \\ R^{3} & H & R^{2} & I \end{bmatrix}$$

AB Colorants, i.e., pigments or dyes, chemical bonded with piperidine-type hindered amines I [R1 = C1-20 (hetero)alkylene, C6-20 arylene, C6-30 heteroarylene; R2-R4 = H, C1-4 (hetero)alkyl; R5, R6 = H, C1-20 (hetero)alkyl, C6-20 (hetero)aryl; X = halo, OH, amino, carboxyl, etc.; n = 1-5], and their compns. with water and/or organic solvents are claimed. The compns. may further contain dispersants, viscosity modifiers, surfactants, wetting agents, permeation agents, pH modifiers, and/or metal oxides. Thus, C.I. Direct Black 5128 was reacted with 2-(γ-chloropropyl)-2,4,6,6-tetramethylpiperidine to give II, 4.0 g of which was mixed with water 78.0, iso-PrOH 3.0, ethylene glycol 10.0, and glycerin 5.0 g, and filtered to give an ink showing no precipitation after 2-mo storage at 60°.

L1 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:607519 CAPLUS

DOCUMENT NUMBER:

139:165986

TITLE:

Colorant particle dispersions for inks and ink-jet

printing method

INVENTOR(S):

Ishizuka, Takahiro

PATENT ASSIGNEE(S): SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 2003221521	A2	.20030808	JP 2002-21652		20020130
US 2004024085	A1	20040205	US 2003-352973		20030129
PRIORITY APPLN. INFO.:			JP 2002-21652 A	7	20020130
			JP 2002-22012 A	1	20020130
			JP 2002-22493 A	1	20020130

AB Title dispersions comprise colorant fine particles containing oil-soluble polymers and phthalocyanine colorants with oxidation potential (vs SCE) >1.0 V dispersed in aqueous media. Thus, 1.5 parts iso-Bu methacrylate-Bu acrylate copolymer having mercaptosuccinic acid and 0.5 parts phthalocyanine colorant were dispersed in THF and tert-butanol and neutralized with sodium hydroxide to give 16%-solids colorant particle dispersion with volume average particle diameter 23 nm, 50 parts of which was mixed with diethylene glycol 8, tetraethylene glycol monobutyl ether 2, and glycerin 5, diethanolamine 1 parts, 1 g polyethylene glycol 2-butyloctanoate, and water, and used for ink-jet printing, showing oxidation potential 1.16 V, good printability, water, light, and ozone resistance, and dark heat solidity.

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:129246 CAPLUS

DOCUMENT NUMBER:

136:169122

TITLE:

Colorant aqueous emulsions with good dispersibility, their water- and light-resistant jet printing inks,

and printing method using them

INVENTOR(S):

Ishizuka, Takahiro

PATENT ASSIGNEE(S):

SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATION NO.	DATE	
JP 2002053766	A2	20020219	JP 2000-241638	20000809	
PRIORITY APPLN. INFO.:			JP 2000-241638	20000809	
OTHER SOURCE(S):	MARPAT	136:169122			

AB The emulsions comprise oil-soluble dyes and vinyl polymers having functional groups to form colorants by oxidation coupling with aromatic primary amines. Thus, an aqueous emulsion containing Bu methacrylate-2-carboxyethyl acrylate-acrylamide chloropyrazolotriazole derivative copolymer Na salt and an azomethine dye (I) showed particle size 92 nm and stable dispersion.

L1 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

130:96927

ACCESSION NUMBER:

1998:799871 CAPLUS

DOCUMENT NUMBER: TITLE:

Lightproofing agents, lightproofing method therewith,

light-resistant colorants,

and formation of light-resistant images therefrom Matsumura, Kazuyuki; Kamei, Masanao; Yamatani, Masaaki

INVENTOR(S):
PATENT ASSIGNEE(S):

Shin-Etsu Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

SOURCE.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10330664	A2	19981215	JP 1997-152808	19970527
PRIORITY APPLN. INFO.:			JP 1997-152808	19970527
pigment 3, thiourea	5, gly rts was	cerol 10, is	d-containing compds o-PrOH 10, N-methyl-2- on a sheet resulting	pyrrolidone

L1 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:449875 CAPLUS

DOCUMENT NUMBER:

127:82916

TITLE:

Colored hot melt ink jet vehicle

INVENTOR(S):

Evans, Philippa Catherine; Hall, Stephen Anthony;

Williams, Kevin George

PATENT ASSIGNEE(S):

Coates Brothers Plc, UK

SOURCE:

Brit. UK Pat. Appl., 18 pp.

CODEN: BAXXDU

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

## PATENT INFORMATION:

PA	rent 1	NO.			KIN	D	DATE		1	APP	LICAT	ION 1	. 07		D.	ATE	
						-									-		
GB	2305	928			A1		1997	0423	(	GB :	1995-	2047	0		1	9951	006
WO	9713	816			A1		1997	0417	1	WO :	1996-0	GB24	46		1	9961	007
	W :	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR	, BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	HU,	ΙL,	IS	, JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK	, MN,	MW,	MX,	NO,	NZ,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	TJ,	TM	, TR,	TT,	UA,	UG,	US,	UZ,	VN,
		AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM							
	RW:	ΚE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH	, DE,	DK,	ES,	FI,	FR,	GB,	GR,
		ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ	, CF,	CG					
AU	9671	403			<b>A</b> 1		1997	0430	1	UA	1996-	7140	3		1:	9961	007
EP	8536	50			A1		1998	0722	]	EP :	1996-:	9327:	27		1	9961	007
EP	8536	50			B1		1999	0707									
	R:	DE,	FR,	GB,	ΙT												
PRIORIT	Y APP	LN.	INFO	. :					(	GB :	1995-:	2047	0	7	A 1:	9951	006
									1	WO :	1996-0	GB24	46	1	W 1	9961	007

AΒ A colored material suitable for use in a hot melt ink comprises a oligomeric hot melt ink jet vehicle formed of mols. having a backbone and ≥1 pendent side-chain dyestuff. The material is preferably obtainable as the reaction product of an aliphatic or aromatic mono- or di-isocyanate and a hydroxyl group functional dye component, and optionally one or more other suitable material including mono- and dihydric alcs., primary and secondary monoamines, functional amides, hydroxyl functional amines and hydroxyl containing components having a terminal unsatd. bond. A red colorant having a softening point 88° was prepared by the urethane reaction of octadecyl isocyanate with Reactint Red X 52 dye.

ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1989:480113 CAPLUS

DOCUMENT NUMBER:

111:80113

TITLE:

Colorants for sublimation thermal-transfer recording Nakamine, Takeshi; Ono, Michio; Kubodera, Seiichi

INVENTOR(S):

Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	DATE APPLICATION NO.				
				_			
JP 01020194	A2	19890124	JP 1987-176625		19870715		
JP 06088462	B4	19941109			_		
US 4983493	Α	19910108	US 1988-218789		19880714		
PRIORITY APPLN. INFO.:			JP 1987-176625	Α	19870715		
GI					<del>-</del>		

$$R^{1}R^{2}N$$
 $R^{3}$ 
 $N^{2}N$ 
 $N^{3}$ 
 $N^{2}N$ 
 $N^{2}N^{2}N$ 
 $N^{2}N^{$ 

AB The title colorants of the structure I (Q =  $\geq$  5-membered heterocycle containing  $\geq$ 1 N; R1 = acyl, sulfonyl; R2 = H, C1-6 aliphatic group; R3 = H, halo, alkoxy, C1-6 aliphatic group; R4 = halo, alkoxy, C1-6 aliphatic group; R3 may form a ring with R1, R2, or R4; R5, R6 = H, C1-6 aliphatic group, aromatic group; R5 and R6 together may form a ring; R5 and/or R6 may from a ring with R4; n = 0-4) are prepared Sublimation-transfer recording sheets containing the colorants gave clear images in printing by using a thermal head. Thus, the amine II and p-dimethylaminoaniline were reacted to give the colorant III ( $\lambda$ max 616 nm). Then an ink containing III was applied on a PET film to give a thermal-transfer recording sheet, which gave clear heat- and light-resistant printed images in a thermal recording process.

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(FILE 'HOME' ENTERED AT 16:03:00 ON 14 APR 2005)

FILE 'CAPLUS' ENTERED AT 16:03:11 ON 14 APR 2005 6 S LIGHT RESISTANT COLORANT?

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